Supreme Court, U.S.
FILED
NOV 15 1999
CLERK

(2)

No. 99-653

IN THE
Supreme Court of the United States

LORAL FAIRCHILD CORPORATION,
Petitioner,

v.

SONY CORPORATION AND SONY ELECTRONICS INC.,
Respondents.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

RESPONDENTS' BRIEF IN OPPOSITION

DOUGLAS B. HENDERSON
(Counsel of Record)
CHARLES E. LIPSEY
BARRY W. GRAHAM
J. MICHAEL JAKES
HOWARD A. KWON
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.
1300 I Street, N.W.
Washington, D.C. 20005-3315
(202) 408-4000
Counsel for Respondents

November 15, 1999

WILSON-EPES PRINTING CO., INC. - (202) 789-0096 - WASHINGTON, D.C. 20001

QUESTION PRESENTED

Whether the court of appeals erred in concluding that the public patent record legally precludes Petitioner in its assertion of patent infringement from recapturing subject matter that was affirmatively and unambiguously relinquished for purposes of procuring the patents to avoid the prior art.

CORPORATE DISCLOSURE STATEMENT

Pursuant to Supreme Court Rule 29.6, Sony Corporation has no parent corporation and wholly owns Sony Electronics Inc. No publicly held company owns 10 percent or more of the stock of Sony Corporation.

TABLE OF CONTENTS

	Page
QUESTION PRESENTED	i
CORPORATE DISCLOSURE STATEMENT	ii
TABLE OF AUTHORITIES	v
STATUTORY PROVISIONS INVOLVED	2
SUMMARY OF ARGUMENT	3
COUNTERSTATEMENT OF THE CASE	6
REASONS FOR DENYING THE PETITION	11
I. PROSECUTION HISTORY ESTOPPEL IS A LEGAL QUESTION FOR THE COURTS TO DECIDE TO ENSURE THAT THE CORRECT RESULT IS REACHED UNDER THE DOCTRINE OF EQUIVALENTS	12
II. THE RESULT REACHED BELOW IS DICTATED BY LORAL'S PRIOR ACTIONS AND ARGUMENTS MEMORIALIZED IN THE PROSECUTION HISTORIES UPON WHICH THE PUBLIC IS ENTITLED TO RELY	13
A. The '674 Patent: Loral Relinquished Coverage Of "Naked-Gate" Masking Processes To Overcome Prior Art Rejections	14
B. The '485 Patent: To Avoid Prior Art Rejections, Loral Relinquished Coverage Of CCDs That Do Not Contain A "Charge Sink Means" Disposed In A Specifically Defined Location Within The Semiconductor Substrate	18
III. THIS CASE IS THE WRONG VEHICLE TO ADDRESS THE QUESTION PRESENTED IN LORAL'S PETITION	19

TABLE OF CONTENTS—Continued

Page

A. The Judgment Of Noninfringement Rests On Independent Alternative Grounds Not Raised In Loral's Petition 19

B. The Issues Identified In Loral's Petition Are To Be Considered En Banc By The Court Of Appeals In A Different Case 22

CONCLUSION 25

TABLE OF AUTHORITIES

Cases Page

Bai v. L & L Wings, Inc., 160 F.3d 1350 (Fed. Cir. 1998) 18
Bennett v. Spear, 520 U.S. 154 (1997) 22
City of Oklahoma City v. Tuttle, 471 U.S. 808 (1985) 11
Dandridge v. Williams, 397 U.S. 471 (1970)
Desper Prods., Inc. v. QSound Lab., Inc., 157 F.3d 1325 (Fed. Cir. 1998) 18
Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 187 F.3d 1381 (Fed. Cir. 1999) (en banc) ..5, 23, 24
Gentry Gallery, Inc. v. Berkline Corp., 134 F.3d 1473 (Fed. Cir. 1998) 5
Hormel v. Helvering, 312 U.S. 552 (1941) 16
Hughes Aircraft Co. v. United States, 140 F.3d 1470, *reh'g en banc denied*, 148 F.3d 1384 (Fed. Cir. 1998), *cert. denied*, 119 S. Ct. 1112 (1999) .. 23
Litton Sys., Inc. v. Honeywell, Inc., 140 F.3d 1449, *reh'g en banc denied*, 145 F.3d 1472 (Fed. Cir. 1998) 23
Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996) 6
Neely v. Martin K. Eby Construction Co., 386 U.S. 317 (1967) 12
Pall Corp. v. Hemasure, Inc., 181 F.3d 1305 (Fed. Cir. 1999) 5
Pharmacia & Upjohn Co. v. Mylan Pharmaceuticals, Inc., 170 F.3d 1373 (Fed. Cir. 1999) 5
Spectrum Int'l, Inc. v. Sterilite Corp., 164 F.3d 1372 (Fed. Cir. 1998) 5
Streamfeeder LLC v. Sure-Feed Sys., Inc., 175 F.3d 974 (Fed. Cir. 1999) 22
Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17 (1997) ..... *passim*
Wilson Sporting Goods Co. v. David Geoffrey & Assocs., 904 F.2d 677 (Fed. Cir. 1990) 22

Statutes

35 U.S.C. § 102 ..... 2, 7, 15
35 U.S.C. § 103(a) 3, 7, 15

TABLE OF AUTHORITIES—Continued

Rules Page

Fed. R. Civ. P. 50 12
Fed. R. Civ. P. 56 12
Fed. R. App. P. 35 24

Miscellaneous

16A Charles A. Wright, *et al.*, FEDERAL PRACTICE AND PROCEDURE § 3986 (3d ed. 1999) 23

IN THE

Supreme Court of the United States

No. 99-653

LORAL FAIRCHILD CORPORATION,
Petitioner,

v.

SONY CORPORATION AND SONY ELECTRONICS INC.,
Respondents.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

RESPONDENTS' BRIEF IN OPPOSITION

Sony Corporation and Sony Electronics Inc. (collectively "Sony") respectfully submit this brief in opposition to the petition for a writ of certiorari filed by Loral Fairchild Corporation ("Loral"). The decision below follows from, *inter alia*, a straightforward application of "prosecution history estoppel" to the unique fact pattern presented by the evidence in this case. The court of appeals properly exercised its legal authority to restrict the range of "equivalents" [1] of the asserted patent claims in conformity

[1] Loral's assertions of patent infringement are predicated entirely on the doctrine of equivalents. Loral concedes that the accused charge coupled devices ("CCDs") fall outside the literal scope of the asserted patent claims, and does not contest the claim construction reached by the courts below. Further, Loral did not challenge on appeal the district court's order granting summary judgment of

with the patentee's statements and actions during the patent procurement process, as memorialized in the public record before the U.S. Patent and Trademark Office ("PTO"). The court of appeals concluded (as did the district court) that no reasonable jury could find that the accused products infringed the patents in suit, and ordered judgment of noninfringement as a matter of law.

The petition presents no issues warranting review by this Court. Indeed, the present case does not involve the question sought to be raised by the petition. Contrary to Loral's assertions, the result reached by the court of appeals in this case follows directly from the public record before the PTO, is entirely consistent with this Court's recent instructions in *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997), and is compelled by application of well-settled legal principles. Moreover, the petition improperly relies on matters not raised before the court of appeals and fails to challenge independent alternative bases supporting the judgment below. Accordingly, this Court should deny the petition.

STATUTORY PROVISIONS INVOLVED

The following statutory provisions involved in this case were not identified in Loral's petition:

35 U.S.C. § 102 provides in pertinent part:

> A person shall be entitled to a patent unless—
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country,

---

no literal infringement of U.S. Patent No. 3,896,485 ("the '485 patent"). (Pet. App. 137a-144a.) Nor does Loral dispute the decision of the court of appeals to affirm the grant of summary judgment of no literal infringement of U.S. Patent No. 3,931,674 ("the '674 patent"). (*Id.* at 16a, 145a-161a.)

> before the invention thereof by the applicant for patent, or
>
> . . .
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent . . . .

35 U.S.C. § 103(a) provides:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

SUMMARY OF ARGUMENT

Loral has demonstrated no basis for review by this Court. First, Loral's arguments for certiorari stem from an incorrect reading of the decision below. The court of appeals did not abandon the so-called "public notice function" of prosecution history estoppel by relying exclusively, as Loral alleges, on non-public information. To the contrary, the court held Loral to the express positions that Loral took before the PTO—as recorded in the publicly available patent prosecution histories—in attempting to distinguish Loral's patent claims from the prior art and obtain allowance of the patents.[2] The decision of the court of appeals thus reaffirms the public's entitlement to rely on the record made in the PTO in determining the meaning and scope of the patents. In any event, Loral

---

[2] For convenience, the actions and statements of the patent applicants and their representatives during prosecution of the patents in suit are ascribed herein to Loral, the current owner of the patents.

did not even raise the issue of reliance on non-public information before the court of appeals and should not be permitted to raise that issue for the first time before this Court.

Second, the court of appeals correctly applied the principle of prosecution history estoppel consistent with this Court's direction in *Warner-Jenkinson*. Loral's petition takes great pains to avoid confronting the undisputed evidence giving rise to the legal limitation that precludes Loral from asserting a broader and contradictory interpretation of its patent claims in litigation. The decision to order judgment of noninfringement as a matter of law necessarily and properly follows from application of this settled legal limitation on the doctrine of equivalents. Neither the application of prosecution history estoppel nor the decision on the specific facts of this case to order judgment of noninfringement as a matter of law presents an issue worthy of this Court's review.

Third, this Court need not even reach the question presented in Loral's petition since resolution of that question would not alter the judgment against Loral. In addition to prosecution history estoppel, the judgment of noninfringement rests on a number of other legally tenable grounds not contested by Loral in its petition. Regarding the '485 patent, for example, the district court entered judgment of noninfringement on the further independent ground that a reasonable jury could not as a matter of law have concluded that the accused devices contain an equivalent of each of the structural elements required by the asserted claims, including the claimed "charge sink means." (Pet. App. 60a-69a.) This legal conclusion was upheld on appeal (*id.* at 31a-33a), and stands unchallenged by Loral. Similarly, the district court also concluded that the range of equivalents to which the claims of the '674 patent are

entitled under the law is restricted by the prior art such that the asserted claims cannot legally cover the accused products. (*Id.* at 69a-91a.) While the court of appeals did not reach this alternative ground in affirming the judgment of noninfringement (*id.* at 4a-5a n.3), this ground nonetheless provides an independent basis for sustaining the judgment below.

Fourth, the fundamental premise of Loral's entire petition is flawed: the question presented in the petition is not raised in this case. While certain doctrinal elements of prosecution history estoppel await eventual clarification by the court of appeals in light of *Warner-Jenkinson,* they are not raised in the present case, and the present case is therefore not the proper vehicle to address them. To the contrary, the present case, like the vast majority of "prosecution history estoppel" cases decided by the court of appeals since *Warner-Jenkinson,*[3] turned on settled and familiar aspects of this legal limitation. By contrast, the court of appeals has recently identified a case that *does* warrant examination of certain exceptional issues residing at the margins of the prosecution-history-estoppel doctrine. In *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.,* 187 F.3d 1381 (Fed. Cir. 1999) (en banc), the court of appeals certified several issues relating to prosecution history estoppel (including those encompassing the abstract complaints found in Loral's petition) that will be addressed by the court en banc. This Court may, in turn, have an opportunity to review these issues after the court of appeals has passed on them in the *Festo* case.

---

[3] *E.g., Pall Corp. v. Hemasure, Inc.*, 181 F.3d 1305, 1311-12 (Fed. Cir. 1999); *Pharmacia & Upjohn Co. v. Mylan Pharmaceuticals, Inc.*, 170 F.3d 1373, 1376-79 (Fed. Cir. 1999); *Spectrum Int'l, Inc. v. Sterilite Corp.*, 164 F.3d 1372, 1379-80 (Fed. Cir. 1998); *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473, 1477 (Fed. Cir. 1998).

COUNTERSTATEMENT OF THE CASE

Loral devotes the bulk of its statement of the case to inaccurate and argumentative narratives that have no bearing on the question presented in its petition. But more importantly, Loral's statement of the case seriously misstates the bases on which judgment of noninfringement as a matter of law was granted and affirmed below. Conspicuously absent from its petition is any meaningful discussion regarding the specific events comprising the prosecution histories of the patents in suit that compel the result reached by the courts below. In that regard, at least two principal misstatements require correction for present purposes:

1. With regard to the '674 patent, Loral erroneously states that the decision reached by the court of appeals turned on non-public information. That statement flies in the face of the court's opinion, which makes abundantly clear that the court relied on the patent's prosecution history—which represents the "undisputed *public record*" of proceedings in the PTO. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995) (emphasis added), *aff'd*, 517 U.S. 370 (1996).

The patent application, official PTO actions, responses by the patent applicant, and other publicly available documents that comprise the prosecution history of the '674 patent firmly establish that the asserted patent claims were narrowed to relinquish coverage of subject matter to avoid the prior art and obtain patent issuance. As originally filed, application claim 17 of the '674 patent application (which ultimately issued as claim 1 of the patent) recited a process in which barrier regions are implanted in a semiconductor substrate such that their edges are "aligned with the respective first gate electrodes." (C.A. Jt. App. A8052.) As such, the claim

plainly encompassed "naked-gate" masking processes, in which implanted barrier regions are aligned with uninsulated gate electrodes. Indeed, there was no step recited in original application claim 17 for applying an insulation layer at all.

The patent examiner rejected application claim 17 as unpatentable in view of the prior art. The examiner regarded the claim as lacking novelty under 35 U.S.C. § 102 in view of U.S. Patent No. 3,796,928 to Doo *et al.* (C.A. Jt. App. A14194) and U.S. Patent No. 3,735,156 to Krambeck (*id.* at A9180), both of which disclosed implanted regions aligned with the edges of uninsulated gate electrodes. (*Id.* at A8062.) The examiner also rejected application claim 17 under 35 U.S.C. § 103 as obvious in view of U.S. Patent No. 3,745,647 to Boleky (*id.* at A9188) and U.S. Patent No. 3,852,799 to Walden (*id.* at A14617). (*Id.* at A8062.) Additionally, application claim 18, which was drawn specifically to an *insulated*-gate masking process (*id.* at A8052), was rejected under section 103 on the ground that it would have been obvious to convert the naked-gate masking process of claim 17 into an insulated-gate masking process in view of the prior art (*id.* at A8062).

In response to the examiner's rejections, Loral narrowed the scope of application claim 17 to avoid the cited prior art. Loral expressly limited the claim to a process in which the edges of the implanted barriers were specifically "aligned with the *vertical edges of the insulation layer* on the respective first gate electrodes." (C.A. Jt. App. A8065 (emphasis added).) Through this amendment, Loral clearly surrendered coverage of naked-gate masking processes, in which implanted barriers are aligned with the vertical edges of uninsulated gates, not the insulation layer.

Moreover, in distinguishing the Boleky prior art reference, Loral acknowledged that "[t]he use of the insulated gate as a mask shows a technique that is generally known in the semiconductor art." (C.A. Jt. App. A8067.) But unlike the prior art, Loral asserted, "[t]he present invention is directed to a *process sequence* which includes this [insulated-gate] masking feature as one step" and that "[t]his *sequence of steps* goes far beyond the teaching" of the prior art. (*Id.* (emphases added).)

Upon reviewing the undisputed patent record *de novo*, the court of appeals reached the same inescapable conclusion as did the district court before it: Loral amended the claims in response to the prior art cited by the examiner, and thus, the amendments were made for purposes of patentability. (Pet. App. 27a-28a.) More specifically, the court of appeals concluded that the evidence, including Loral's amendment to claim 17 "inserting verbatim" the language of canceled claim 18 directed to insulated-gate masking and the concomitant double reference to the resulting "sequence" of the process steps, was "sufficient to demonstrate a surrender by the applicant of naked gate masking processes." (*Id.* at 30a (footnote omitted).)

Therefore, Loral is wrong in arguing that the decision of the court of appeals turned on non-public evidence. To the contrary, the court relied on the public patent record, which clearly establishes that Loral gave up coverage of naked-gate masking processes in order to obtain its patent claims in view of the prior art.

2. With regard to the '485 patent, Loral asserts that the prosecution history shows that the claims were amended only to surrender CCD structures with "surface drains" and not "vertical overflow drains." (Pet. 24.) This overly restrictive description of the result of Loral's amendments to the claims during prosecution before the PTO is care-

fully worded to acknowledge (as Loral must) that the claims were amended to overcome the examiner's prior art rejections without conceding any ground on Loral's assertion of non-literal infringement by the accused products. When read objectively, however, the prosecution history belies Loral's post hoc, litigation-induced interpretation of the events that led to the issuance of its patent claims.

The patent record reveals that, in avoiding the prior art cited by the patent examiner, Loral claimed a CCD structure with a "charge sink means" having a specifically defined location within the semiconductor substrate. As originally filed, claim 1 of the '485 patent application recited a CCD structure having a charge sink means "buried within" the semiconductor material for receiving excess charge accumulated in a light sensing element, which was designed to eliminate an undesired photoelectronic phenomenon referred to as "blooming." (C.A. Jt. App. A8099, A14138.) The claim did not contain any further restrictions on location within the semiconductor material.

The patent examiner rejected application claim 1 for obviousness in view of U.S. Patent No. 3,771,149 to Collins *et al.* (C.A. Jt. App. A14188) and a published article entitled "Blooming Suppression in Charge Coupled Area Imaging Devices" by C. H. Sequin (*id.* at A9175), which disclosed blooming suppression in CCDs through a diffusion layer near the surface of the device. (*Id.* at A14151-52.) Noting that application claim 1 did not specify any location of the charge sink region other than that it is buried "within the semiconductor material," the examiner considered the claim to encompass CCDs using charge sinks that were in contact with the surface of the semiconductor material. (*Id.* at A14151.) Accordingly, the examiner determined that it would have been obvious to incorporate the diffused charge sink of the

Sequin article into the CCD shift register of the device described in the Collins patent to produce the structure claimed in application claim 1. (*Id.*)

In response to the examiner's prior art rejection, Loral narrowed the scope of application claim 1 by excluding CCDs having a charge sink means in contact with the surface of the semiconductor material. Specifically, Loral amended the claim to specify that the charge sink means is "located beneath and not in contact with the surface of said semiconductor material." (C.A. Jt. App. A14156.) Loral distinguished the claimed structure from the prior art by arguing that the charge sink regions in the Sequin and Collins prior art references "are located *in* the surface of the semiconductor substrate" whereas "the charge sink region in applicant's structure is *buried* in the substrate (semiconductor material) and 'located beneath and not in contact with the surface of said semiconductor material.'" (*Id.* at A14159 (emphasis own).)

Subsequently, Loral canceled application claim 1 in favor of new application claim 10, which imposed additional location restrictions on the charge sink means to "distinguish over the references of record." (C.A. Jt. App. A14164.) New application claim 10, which ultimately issued as claim 1 of the '485 patent, recited a charge sink means "buried within" the semiconductor material and "extending laterally" toward a light sensing element "while beneath the surface" of the semiconductor material. (*Id.* at A14162.) These amendments to application claim 10 overcame the examiners' rejections, and the claim issued as claim 1 of the '485 patent.

The court of appeals concluded, based on the undisputed patent record, that Loral amended claim 1 to avoid the prior art cited by the examiner by "better defin[ing] the location of the charge sink means." (Pet. App. 35a.)

Consequently, the court held that Loral is now estopped from recapturing a charge sink means that is not disposed in the specifically defined location required by the claim. The record reaffirms that the court's judgment is fully consistent with the scope of subject matter surrendered by Loral in securing patentability of the claims in view of the prior art.

REASONS FOR DENYING THE PETITION

Loral fails to provide any compelling grounds that justify requesting the Court's "commitment of scarce judicial resources" to grant certiorari and review the question presented in the petition. *See City of Oklahoma City v. Tuttle,* 471 U.S. 808, 816 (1985). When read correctly, the decision of the court of appeals does not warrant review of that question by this Court.

Loral's petition turns on a seriously flawed understanding as to how the court of appeals reached its decision. As evidenced by its opinion, the judgment of the court of appeals follows from an unremarkable and straightforward application of prosecution history estoppel to limit the range of equivalents to which the claims of the patents in suit are entitled in a manner consistent with the public patent record. In any event, the correctness of that judgment is readily confirmed without regard at all to the prosecution history estoppel arguments raised by Loral. Indeed, this Court need not pass on the question presented in Loral's petition since the judgment of noninfringement rests on other meritorious grounds not challenged by Loral.

I. PROSECUTION HISTORY ESTOPPEL IS A LEGAL QUESTION FOR THE COURTS TO DECIDE TO ENSURE THAT THE CORRECT RESULT IS REACHED UNDER THE DOCTRINE OF EQUIVALENTS

This Court has recently charged the district courts and the Federal Circuit to give serious consideration in jury trials to directing judgment as a matter of law on the issue of infringement under the doctrine of equivalents. Specifically, in view of the judicial obligation imposed by Fed. R. Civ. P. 50 and 56 to ensure a result mandated by the law on the record, this Court has reminded the federal courts that they "are obliged" to enter judgment of non-infringement under the doctrine of equivalents "[w]here the evidence is such that no reasonable jury could determine two elements to be equivalent." *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 39 n.8 (1997).

In accordance with that judicial duty, this Court has reaffirmed that "the various legal limitations on the application of the doctrine of equivalents are to be determined by the court, either on a pretrial motion for partial summary judgment or on a motion for judgment as a matter of law at the close of the evidence and after the jury verdict." *Id.* Here, the district court fulfilled its judicial obligation by entering judgment of noninfringement—a result compelled by the law in view of the undisputable facts of this case.[4]

---

[4] Hence, Loral's reliance on the jury's findings of infringement under the doctrine of equivalents are without force at this stage of the case. Loral fails to recognize that the district court correctly removed those issues from the jury under Rule 50(b) because no reasonable juror could find infringement under the doctrine of equivalents in view of the applicable law. *See Warner-Jenkinson*, 520 U.S. at 39 n.8; *Neely v. Martin K. Eby Construction Co.*, 386 U.S. 317, 321 (1967).

The court of appeals, in turn, affirmed that judgment because the accused products were beyond the legal reach of the asserted claims. In particular, the court of appeals agreed that the claims were not entitled to a range of equivalents that covered the accused products in light of the affirmative statements and actions of the patent applicants made in connection with procuring the patents from the PTO. Specifically, having surrendered subject matter through arguments and claim amendments to obtain successfully the allowance of the claims in view of the prior art, the court of appeals held that Loral is now precluded as a matter of law from attempting to recapture that subject matter during litigation.

II. THE RESULT REACHED BELOW IS DICTATED BY LORAL'S PRIOR ACTIONS AND ARGUMENTS MEMORIALIZED IN THE PROSECUTION HISTORIES UPON WHICH THE PUBLIC IS ENTITLED TO RELY

Loral's petition begs the question regarding how the issues raised in its petition have any relevance to this case. Indeed, the putative answer remains a mystery until nearly the end of the petition, where Loral supplies a cursory and baseless account of what the patent applicants actually intended when (over twenty-five years ago) they relinquished coverage of subject matter to secure the patents in light of the prior art. (Pet. 23-24.) But Loral's self-serving explanation of the events leading to the issuance of the patents in suit is inapposite, for those events—as recorded in the public patent record—objectively speak for themselves. Litigation is neither the time nor place to reargue the merits of a prior art rejection that caused an amendment to be made to gain allowance of the claims. *See Warner-Jenkinson*, 520 U.S. at 33 n.7.

The application of prosecution history estoppel by the court of appeals to limit the scope of Loral's right to

exclude under the doctrine of equivalents was straightforward and noncontroversial. Prosecution history estoppel firmly applies here to foreclose Loral from expanding the scope of its claims to cover subject matter relinquished by the applicants to obtain issuance of the claims in view of the prior art. Indeed, the record manifests the classic factual pattern that necessitates application of prosecution history estoppel: (1) the filing of a broad claim, (2) a rejection by the PTO based on the fact that the claim as written is viewed as not describing a patentable invention because what is described in the claim is encompassed within the prior art, (3) a substantive change in the claim language, coupled with argument, whereby the applicant relinquishes claim scope to avoid the prior art and obtain the patent.

In view of the public patent record, the judgment below is precisely that which was contemplated by this Court in *Warner-Jenkinson* in upholding the operation of prosecution history estoppel as a legal limitation on the doctrine of equivalents. *See* 520 U.S. at 30 (recognizing prosecution history estoppel (also known as "file wrapper estoppel") as a "well-established limit on non-literal infringement").

A. The '674 Patent: Loral Relinquished Coverage Of "Naked-Gate" Masking Processes To Overcome Prior Art Rejections

When Loral's petition finally turns to the '674 patent record upon which the judgment of the courts below rests, Loral essentially argues that prosecution history estoppel does not apply because Loral did not amend application claim 17 (which eventually issued a claim 1 of the patent) to avoid the prior art cited by the examiner. (Pet. 23.) That argument, however, relies on a highly selective (and thus distorted) reading of the prosecution history that

completely ignores the fact that the scope of the claim was narrowed in response to a rejection by the patent examiner based on prior art. Indeed, Loral fails to heed the caution of the court of appeals that "the entire record must be analyzed using an objective standard to determine what has been surrendered during prosecution." (Pet. App. 30a (citation omitted).)

The record confirms that application claim 17, which was originally drawn to a naked-gate masking process, was rejected under 35 U.S.C. §§ 102 and 103 for lack of novelty and for obviousness, respectively. To avoid the prior art cited by the examiner, Loral substantively incorporated the limitations of application claim 18 into claim 17, thereby converting claim 17 into an insulated-gate masking process.[5] Further, Loral argued that the invention was directed to a "process sequence which includes [an insulated-gate] masking feature as one step" and that this "sequence of steps goes beyond the teaching" of the prior art. (C.A. Jt. App. A8067.) Loral's amendments to claim 17, and its accompanying arguments, successfully overcame the examiner's prior art rejections, and the claim issued as claim 1 of the '674 patent.

---

[5] Application claim 18 contained two limitations directed to an insulated-gate masking process: (1) the step of applying an insulation layer before implantation, and (2) aligning the barrier region with the vertical edges of the insulation layer. (C.A. Jt. App. A8052.) Claim 18 was canceled in connection with the amendment of application claim 17 to incorporate these steps. (*Id.* at A8065.) In that regard, if it were true, as Loral contends, that application claim 17 was somehow generic to both naked-gate and insulated-gate masking processes (*see* Pet. 23), then there would have been no reason for the applicant to cancel claim 18, which was restricted to an insulated-gate masking process. But the fact remains that claim 18 was canceled, and the reason for the cancellation is plain: after the amendment of claim 17 to recite only an insulated-gate masking process, claim 18 was rendered surplusage.

In view of this incontrovertible evidence, there can be no question that the addition of a sequence of steps including the insulated-gate masking feature in claim 1 of the '674 patent avoided the prior art. Accordingly, the court of appeals was correct in determining that the claim was amended for a reason related to patentability and that prosecution history estoppel applies to preclude Loral from attempting to assert a range of equivalents extending to CCD processes (such as Sony's) that do not use the required insulated-gate masking feature.

Loral, while understandably dissatisfied with the result mandated by the undisputed evidence, does not offer any legitimate reason why the court of appeals reached the wrong conclusion based on the record. For example, Loral complains that the court of appeals referred to the allegedly non-public prosecution history of a related patent application directed to the CCD structure itself. Yet, the district court also relied in part on this same evidence. (Pet. App. 100a-101a.) On appeal, however, Loral did not raise the issue whether such reliance on "non-public" information was improper. This Court should decline, therefore, to give consideration of issues not raised below. *See Hormel v. Helvering*, 312 U.S. 552, 556 (1941).

Loral also complains that the court did not undertake a "scope analysis." (Pet. 23.) Local contends, for instance, that the court did not investigate the "reasons" underlying the amendments to the claims. (Pet. 22.) But that contention is directly refuted by the court of appeals' opinion. Indeed, the court dutifully acknowledged (citing *Warner-Jenkinson*) that it "must examine the reasoning behind the amendment to determine if it was made for purposes of patentability." (Pet. App. 26a.)

As revealed by the opinion of the court below, the scope of Loral's estoppel is self-evident from the record.

Original application claim 17 was drawn to a naked-gate masking process. The examiner rejected application claim 17 as lacking novelty and as being obvious in view of the prior art. Loral responded to the rejection by amending the claim to incorporate the insulated-gate steps of application claim 18 (which was then canceled). In doing so, Loral specifically pointed out that application claim 17 as amended was directed to a sequence of steps that included an insulated-gate masking process and that this sequence of steps including the insulated-gate masking feature obviated the prior art. Thus, the prosecution history, when viewed objectively and as a whole, confirms that Loral relinquished coverage of a naked-gate masking process to procure its patent claims.[6]

This Court should reject Loral's invitation to re-analyze the record to determine whether Loral's amendment to application claim 17 was necessary to gain allowance of the claims in view of the prior art. Indeed, where a change is made to overcome an objection based on the prior art, a court is not free to review the correctness of that objection when deciding whether to apply prosecution history estoppel. *Warner-Jenkinson*, 520 U.S. at 33 n.7. Rather, "such concerns are properly addressed on direct appeal

---

[6] As the court of appeals recognized, this conclusion is further reinforced by Loral's failure to cite to the examiner reviewing the '674 patent application a known reference disclosing a CCD structure made from a naked-gate masking process ("the Erb publication"). Loral does not deny having knowledge of the Erb publication during the prosecution of the '674 patent. Had Loral then believed that its patent application claims covered naked-gate masking processes, the nondisclosure of the Erb publication would have violated the duty of disclosure and good faith imposed on all patent applicants. While Loral challenges the reference by the court of appeals to this publication, Loral does not dispute its relevancy and the conclusions that are necessarily drawn from Loral's failure to disclose it to the PTO during prosecution of the '674 patent application.

from the denial of a patent, and will not be revisited in an infringement action." *Id.* (citation omitted).

B. The '485 Patent: To Avoid Prior Art Rejections, Loral Relinquished Coverage Of CCDs That Do Not Contain A "Charge Sink Means" Disposed In A Specifically Defined Location Within The Semiconductor Substrate

Loral also offers an incorrect description of the prosecution history of the application that issued as the '485 patent. Loral's contention that it only surrendered coverage of CCD structures containing "surface drains" as opposed to "vertical overflow drains" (*see* Pet. 24) is a thinly veiled attempt to rewrite the record of Loral's prior actions before the PTO decades after the patent issued. But "[i]t is now too late in the game" for Loral to alter the record on which the public has properly come to rely. *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1356 (Fed. Cir. 1998); *see also Desper Prods., Inc. v. QSound Lab., Inc.*, 157 F.3d 1325, 1340 (Fed. Cir. 1998) ("Post-hoc, litigation-inspired argument cannot be used to reclaim subject matter that the public record in the PTO clearly shows has been abandoned.").

Once again, an objective reading of the prosecution history of the '485 patent plainly refutes Loral's efforts to recapture for purposes of litigation what it unambiguously abandoned in procuring the patent claims in view of the prior art. The prosecution history of the '485 patent establishes beyond any question that in obtaining allowance of its patent claims in view of the prior art, Loral expressly narrowed the scope of the claims to cover only a CCD having a charge sink means defined by a specific location: *i.e.*, (1) buried beneath the semiconductor material so that it is not in contact with the surface, and (2) extending laterally toward a light sensing element. Having surrendered a broad claim in favor of one that narrowly and precisely defines the location of the

charge sink means, Loral is now estopped, as a matter of law, from claiming equivalency for CCDs that do not conform to those express restrictions. The accused Sony devices, which allow excess charge to flow vertically downward into and through a homogenous semiconductor substrate, do not satisfy either of the limitations that were inserted by Loral to secure allowance of the '485 patent claims in view of the prior art.

Loral complains that the court of appeals did not analyze the "scope" of the applicable estoppel in light of the prior art. (Pet. 23.) That argument ignores the record and the court's decision. The court of appeals need not have elaborated on the reasoning underlying its decision where, as here, the correctness of that decision is self-evident from the face of the record presented by the parties. The entire patent record was before the court of appeals, including the prior art references cited by the examiner. The subject matter that was surrendered by Loral and the reason for such surrender are manifest from that record: in order to obtain its patent claims in view of the PTO's prior art rejections, Loral affirmatively surrendered coverage of CCD structures (such as Sony's) having charge sink means that are not otherwise buried beneath and not in contact with the surface, and that do not extend laterally toward a light sensing element. (Pet. App. 34a-35a.)

III. THIS CASE IS THE WRONG VEHICLE TO ADDRESS THE QUESTION PRESENTED IN LORAL'S PETITION

A. The Judgment Of Noninfringement Rests On Independent Alternative Grounds Not Raised In Loral's Petition

For the reasons set forth above, the simple and undeniable truth is that the result reached below was the correct one, and is fully in conformity with the undisputed

patent record and the governing legal rules by which that record must be assessed. Loral's effort to manufacture an issue worthy of review by this Court where none otherwise exists is completely unavailing.

This Court need not even reach the question presented in Loral's petition in view of the presence of other meritorious grounds upon which the judgment of noninfringement securely rests. With respect to the '485 patent, for example, the judgment below also rested on another ground not challenged by Loral in its petition. In addition to concluding that Loral could not recover under the doctrine of equivalents subject matter surrendered during prosecution to avoid the prior art, the court of appeals further agreed that no reasonable jury could have found that the accused devices infringed because they contained no structure equivalent to the claimed "charge sink means." (Pet. App. 31a.)

Claim 1 of the '485 patent defines the "charge sink means" as a distinct structure "buried within" the semiconductor material that (1) is doped opposite from the surrounding semiconductor material, (2) is completely surrounded by semiconductor material, and (3) extends parallel to the top surface and perpendicular to a contact toward the light sensing elements. The court of appeals concurred with the district court that there was no substantial evidence in the record upon which a reasonable jury could find that the accused devices contained such structure, either literally or equivalently:

> In the Sony device, the entire substrate functions as charge sink. There is no structure doped opposite to the surrounding semiconductor material as required by the claims of the '485 patent. Because the entire substrate functions as a charge sink in the Sony device, nothing is "buried within" the substrate as the claim requires. Sony also has no charge sink struc-

> ture extending laterally from the contact to the light sensing element. Finally, Sony's substrate is not "beneath the surface" as contemplated by the claim language. Accordingly, it is quite clear that Sony's device contains no equivalent to the precisely described charge sink in the '485 patent. The district court correctly held that Sony cannot infringe under the doctrine of equivalents.

(Pet. App. 33a.)

Loral does not challenge the conclusion of the court of appeals that the accused devices do not contain a substantial equivalent of the claimed "charge sink means." The absence of this claimed limitation in the accused devices compels judgment of non-infringement under the "all elements" rule, which this Court in *Warner-Jenkinson* reinforced as a critical limitation on the doctrine of equivalents:

> Each element contained in a patent claim is deemed material to defining the scope of the patented invention, and thus the doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole. It is important to ensure that the application of the doctrine, even as to an individual element, is not allowed such broad play as to effectively eliminate that element in its entirety.

520 U.S. at 29.

Because the accused devices do not have any structure corresponding to the "charge sink means" required by the asserted claims of the '485 patent, either literally or equivalently, Sony is entitled to judgment of noninfringement as a matter of law without regard to the merits of the question presented in Loral's petition.

Similarly, in entering judgment of noninfringement on the '674 patent, the district court also concluded that the

range of equivalents that was necessary to reach the accused products would impermissibly cover the prior art. (Pet. App. 71a-72a.) Specifically, the prior art disclosed a process for making a CCD using naked-gate masking steps. As such, Loral is legally barred from asserting infringement under the doctrine of equivalents over the accused products, which use the prior art naked-gate masking process.

This prior-art limitation on the doctrine of equivalents rests on the sound principle that a patentee cannot obtain under the doctrine of equivalents coverage that the patentee could not lawfully have obtained from the PTO by literal claims. *See Wilson Sporting Goods Co. v. David Geoffrey & Assocs.*, 904 F.2d 677, 684 (Fed. Cir. 1990). In view of the prior art, Loral could not discharge its burden to prove that the range of equivalents which it sought would not ensnare the prior art. *Streamfeeder LLC v. Sure-Feed Sys., Inc.*, 175 F.3d 974, 984 (Fed. Cir. 1999). Thus, no reasonable jury could find infringement of the claims under the doctrine of equivalents as a matter of law. *See Wilson Sporting Goods*, 904 F.2d at 684-85. While the court of appeals did not reach this issue—having already disposed of the infringement allegation on other grounds—it nevertheless provides an independent basis for sustaining the judgment of the courts below. *See Dandridge v. Williams*, 397 U.S. 471, 475 n.6 (1970); *Bennett v. Spear*, 520 U.S. 154, 166 (1997).

B. The Issues Identified In Loral's Petition Are To Be Considered En Banc By The Court Of Appeals In A Different Case

Finally, a comparative review of other cases involving prosecution history estoppel confirms that the specific question presented in Loral's petition is not raised in the present case. Loral quotes extensively from dissenting

and concurring opinions in other cases [7] in which the en banc court of appeals declined to consider issues relating to the scope and application of prosecution history estoppel since this Court's decision in *Warner-Jenkinson.* (Pet. 5-6.) Those cases, however, like the present one, did not raise the issues that Loral now asks this Court to review. For that matter, the present case fared even worse, as it did not elicit the public views of a single judge in favor of granting rehearing. The absence of any issues meriting reconsideration was confirmed by the fact that the court did not even request a response from Sony en route to denying the petition outright. *See* 16A Charles A. Wright, et al., FEDERAL PRACTICE AND PROCEDURE § 3986 at 728 (3d ed. 1999) (stating that an appellate court should order a party to respond to a petition for a rehearing if "the court finds any possible merit in the petition").

By contrast, on August 20, 1999, the court of appeals granted a petition for rehearing en banc, *Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co.,* 187 F.3d 1381 (Fed. Cir. 1999) (en banc), to address certain issues pertaining to prosecution history estoppel that this Court in *Warner-Jenkinson* left for the court of appeals to consider. The petition for rehearing in the *Festo* case was pending at the court of appeals at the same time as Loral's rehearing petition. The dramatic difference in the disposition of these contemporaneous petitions severely undercuts Loral's argument that the present case raises any issues worthy of this Court's review. Indeed, whereas the court of appeals agreed to rehear the *Festo* case en

---

[7] *Hughes Aircraft Co. v. United States,* 148 F.3d 1384 (Fed. Cir. 1998) (order denying petition for hearing en banc), *cert. denied,* 119 S. Ct. 1112 (1999); *Litton Sys., Inc. v. Honeywell, Inc.,* 145 F.3d 1472 (Fed. Cir. 1998) (order denying petition for rehearing en banc).

banc to consider issues relating to prosecution history estoppel in light of *Warner-Jenkinson,* the court summarily denied Loral's petition without even requesting a response from Sony.[8]

Thus, as the court of appeals recognized, the present case does not squarely raise the issues identified in Loral's petition, and is, therefore, the wrong vehicle to consider those issues. The Federal Circuit has already decided to address these and other issues in the *Festo* case where they are squarely presented, and this Court will likely have an opportunity to review the appellate court's resolution of these issues in connection with the *Festo* case.[9]

At the very least, it would be inadvisable from a jurisprudential standpoint for this Court to take up these issues here. Out of deference to the judicial process and the role of the court of appeals within that process, this Court has committed further development and refinement of the doctrine of equivalents to the Federal Circuit "in the orderly course of case-by-case determinations." *Warner-Jenkinson,* 520 U.S. at 40. This Court has indicated that it would "leave such refinement to that court's sound judgment in this area of its special expertise." *Id.* Review of these issues in the present case, where they are not squarely presented, would defeat this deliberative process

---

[8] Many of the same arguments contained in its petition to this Court were previously made by Loral when it challenged the application of prosecution history estoppel in its petition for rehearing en banc to the court of appeals. The court of appeals, in denying Loral's rehearing petition, did not agree that its affirmance of the district court's judgment was contrary to its own precedent or the decisions of this Court. Nor did the court of appeals deem the appeal to involve any questions of exceptional importance pursuant to Fed. R. App. P. 35. (Pet. App. 120a.)

[9] Briefing on the prosecution history estoppel issues in *Festo* will be completed, pursuant to court order, by November 29, 1999. The court of appeals has not yet scheduled oral argument.

by preventing the court of appeals from addressing the issues in the first instance and depriving this Court of the benefit of the lower court's views.

CONCLUSION

For the foregoing reasons, the petition for a writ of certiorari should be denied.

Respectfully submitted,

DOUGLAS B. HENDERSON
(Counsel of Record)
CHARLES E. LIPSEY
BARRY W. GRAHAM
J. MICHAEL JAKES
HOWARD A. KWON
FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.
1300 I Street, N.W.
Washington, D.C. 20005-3315
(202) 408-4000
Counsel for Respondents

November 15, 1999